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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/824,219 | 04/03/2001 | Tsukasa Ooishi | 57454-054 | 9122 |

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| EXAMINER |
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SHERKAT, AREZOO

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| ART UNIT | PAPER NUMBER |
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2131

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/824,219 | OOISHI, TSUKASA | |
| | Examiner | Art Unit | |
| | Arezoo Sherkat | 2131 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 1-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4/3/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-17 are presented for examination.

Claim Objections

The claims are objected to because the lines are crowded too closely together, making reading and entry of amendments difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Dulude et al., (U.S. Patent No. 6,310,966 and Dulude hereinafter).

Regarding claim 1, Dulude discloses an authentication apparatus collecting a distributed electronic document with an electronic signature fox authenticating said electronic document comprising:

an electronic signature generating portion using personal information obtained by digitizing information associated with a physical feature of an individual to perform a first operation on first information for generating an encrypted electronic signature and adding said encrypted electronic signature to said electronic document (Col. 4, lines 25-67 and Col. 5, lines 1-33); and

an individual authenticating portion extracting said encrypted electronic signature added to said electronic document and performing a second operation to decrypt said encrypted electronic signature for authentication of personal identification (Col. 6, lines 28-67 and Col. 7-8, lines 1-67).

Regarding claim 2, Dulude discloses wherein said electronic signature generating portion includes a personal bit information generating portion encrypting personal information of said individual to generate personal bit information;

a logic operation portion using the personal bit information generated by said personal bit information generating portion to perform a logic operation on said first information for encryption (Col. 4, lines 55-67 and Col. 5, lines 1-15); and

an electronic signature adding portion adding the information entered by said logic operation portion as said encrypted electronic signature to said electronic document (Col. 6, lines 18-28).

Regarding claim 3, Dulude discloses wherein said individual authenticating portion includes

an extracting portion extracting said encrypted electronic signature added to said electronic document, a logic inverse operation portion performing a logic inverse operation on said encrypted electronic signature extracted by said extracting portion using the personal bit information generated by said personal bit information generating portion for generating second information, and a comparing portion comparing said first information with said second information generated by said logic inverse operation portion for authentication of personal identification (Col. 6, lines 28-67 and Col. 7, lines 1-25).

Regarding claim 4, Dulude discloses an authentication apparatus for authenticating personal identification at a time of payment with a card comprising:

an identification information generating portion performing a logic operation on first information using personal information of an individual for generating encrypted identification information (Col. 4, lines 55-67 and Col. 5, lines 1-15); and

an authenticating portion comparing identification information pre-recorded in said card with the entered identification information generated by said identification

information generating portion for authentication of personal identification (Col. 6, lines 28-67 and Col. 7, lines 1-25).

Regarding claims 5-10, Dulude discloses wherein said authentication apparatus further includes:

a logic inverse operation portion performing a logic inverse operation using the personal bit information generated by said personal bit information generating portion on an identification information pre-recorded in said card for generating second information, and a comparing portion comparing said first information with the second information generated by said logic inverse operation portion for authentication of personal identification (Col. 6, lines 28-67 and Col. 7, lines 1-25).

Regarding claims 11-13, Dulude discloses an electronic authentication system including a verification apparatus for verifying an individual by a handwritten signature at a time of card payment and an authentication apparatus for determining validity of payment which are interconnected,

said authentication apparatus including a personal bit information generating portion encrypting personal information of an individual for generating personal bit information (Col. 4, lines 55-67 and Col. 5, lines 1-63);

a first logic operation portion performing a logic operation on first information using the personal bit information generated by said personal bit information generating portion for generating first identification information, a cipher key generating portion

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performing a logic operation using the first identification information generated by said first logic operation portion on first sign information obtained by digitizing a handwritten signature for generating a cipher key, a private identification number extracting portion extracting a private identification number from information transmitted from said verification apparatus, a logic inverse operation portion performing a logic inverse operation using the personal bit information generated by said personal bit information generating portion on the private identification number extracted by said private identification number extracting portion for generating second information, and a comparing portion comparing said first information with second information generated by said logic inverse operation portion for determining validity of payment (Col. 6, lines 28-67 and Col. 7, lines 1-67 and Col. 8, lines 1-55),

said verification apparatus including a second logic operation portion performing a logic operation using the cipher key generated by said cipher key generating portion on second identification information recorded in said card for generating second sign information (Col. 5, lines 25-67 and Col. 6, lines 1-28); and

an identity determining portion comparing the second sign information generated by said second logic operation portion with third sign information obtained by digitizing a handwritten signature for determining identity of the individual (Col. 6, lines 28-67 and Col. 7, lines 1-25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dulude et al., (U.S. Patent No. 6,310,966 and Dulude hereinafter), in view of Bartoli et al., (U.S. Patent No. 6,047,268 and Bartoli hereinafter).

Regarding claim 14, Dulude discloses an authentication apparatus further including: a logic inverse operation portion performing a logic inverse operation using the personal bit information generated by said personal bit information generating portion on an identification information pre-recorded in said card for generating second information (Col. 4, lines 55-67 and Col. 5, lines 1-63).

Dulude does not expressly disclose using a number changing over time on personal information of an individual for generating an encrypted private identification number (i.e., Examiner interprets incorporating a number that is changing over time into the encrypted private identification number as generating a different private identification number for an individual in different transactions).

However, Bartoli discloses an authentication apparatus for authenticating personal identification when a payment request is made from an external portion, comprising: a private identification number generating portion performing a logic inverse operation using a first number changing over time on personal information of an individual for generating an encrypted private identification number, and determining portion performing a logic operation on the externally received information using the

private identification number generated by said private identification number generating portion for determining identity of the individual based on said logic operation result (Col. 5, lines 60-67 and Col. 6, lines 1-6).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teachings of Dulude with the teachings of Bartoli because it would allow to include a private identification number generating portion performing a logic inverse operation using a first number changing over time on personal information of an individual for generating an encrypted private identification number, and determining portion performing a logic operation on the externally received information using the private identification number generated by said private identification number generating portion for determining identity of the individual based on said logic operation result with the motivation to provide for precluding further fraudulent use by the misappropriating cookie thief (Bartoli, Col. 3, lines 15-51).

Regarding claims 15-17, Dulude discloses an authentication apparatus further including: a logic inverse operation portion performing a logic inverse operation using the personal bit information generated by said personal bit information generating portion on an identification information pre-recorded in said card for generating second information (Col. 4, lines 55-67 and Col. 5, lines 1-63);

an identification determining portion comparing the logic operation result from said logic operation portion with the logic inverse operation result from said number

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inverse operation portion for determining identity of the individual (Col. 6, lines 28-67 and Col. 7, lines 1-25).

Dulude does not expressly disclose using a random private identification number of an individual for generating an encrypted private identification number (i.e., Examiner interprets randomness as a different private identification number for an individual in different transactions).

However, Bartoli discloses wherein said determining portion includes

a logic operation portion externally receiving a random private identification number generated by performing a logic inverse operation on sign data pre-determined by the individual using personal information of the individual for performing a logic operation on said random private identification number using the private identification number generated by said private identification number generating portion, a number inverse operation portion externally receiving sign data and a second number changing over time for performing a logic inverse operation on said sign data using said second number (i.e., the cookie value is an encrypted string that comprises in its decrypted form a static information portion and a dynamic information portion. The static portion is an alphanumeric string identifying the user's account number as it is stored in database 106, physical characteristic of the individual such as finger print, etc.. The dynamic portion includes a random number generated by the billing server and a sequence number that is stored in database 106 in association with the user's account number)(Col. 5, lines 1-67 and Col. 6, lines 1-7).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teachings of Dulude with the teachings of Bartoli because it would allow to include a logic operation portion externally receiving a random private identification number generated by performing a logic inverse operation on sign data pre-determined by the individual using personal information of the individual for performing a logic operation on said random private identification number using the private identification number generated by said private identification number generating portion, a number inverse operation portion externally receiving sign data and a second number changing over time for performing a logic inverse operation on said sign data using said second number with the motivation to provide for precluding further fraudulent use by the misappropriating cookie thief (Bartoli, Col. 3, lines 15-51).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Leeper, (U.S. Publication No. 20030195935),
Karthik, (U.S. Publication No. 20020010857),
Shkey, (U.S. Patent No. 6,260,024),
Sowinski, (U.S. Patent No. 6,601,033),
Teppler, (U.S. Patent No. 6,792,536), and
Uberti, (U.S. Publication No. 20010051924).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arezoo Sherkat whose telephone number is (571) 272-3796. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arezoo Sherkat
Patent Examiner
Art Unit 2131
Dec. 9, 2004



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12/10/04